

ABSTRACT

A chemiluminescent 1,2-dioxetane includes an alkaline phosphatase triggerable stable 1,2-dioxetane; a polymeric enhancer which is either an ammonium or phosphonium salt of a polyvinylbenzyl chloride and an aqueous enzyme diluent or stabilizer which corresponds to blood component including blood protein. The system is efficacious for single molecule detection of alkaline phosphatase and other enzymes.